

October 10, 2015

Via Electronic Filing

Marlene H. Dortch Secretary Federal Communications Commission 445 Twelfth Street SW Washington, DC 20554

Re:

Terrestrial Use of the 2473-2495 MHz Band for Low-Power Mobile Broadband Networks, IB Docket No. 13-213; Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems, RM-11685

Dear Ms. Dortch:

Globalstar's September 10, 2015, ex parte letter in this docket highlights that consumers would benefit dramatically if Wi-Fi channel 14 (2472-2495 MHz) became available for public use on the same basis as channels 1, 6, and 11, so that all unlicensed devices could move freely among those non-overlapping channels. But Globalstar proposes nothing of the sort. Its pending request seeks *exclusive* Wi-Fi use of channel 14. At most a tiny fraction of the potential users of channel 14 would have access to it, and they would need to pay Globalstar for the privilege. Virtually none of the potential benefit of public use would be realized.

Globalstar's submission thus highlights how much value is being foregone by preventing public use of Wi-Fi channel 14 (as well as channels 12 and 13) on account of Globalstar's satellite operations above 2483.5 MHz. It begs the question whether it is possible to allow general unlicensed use of channel 14 while still protecting Globalstar's satellite services.

Likely so. In the years since Globalstar first proposed its proprietary Terrestrial Low Power Service (TLPS), spectrum-sharing technologies have made Part 15's wholesale preclusion of Wi-Fi-type operations near and above 2483.5 MHz obsolete.¹ The Commission now has tools that could put the entirety of the 2.4 GHz unlicensed band to use on a non-interfering basis *and* allow sharing of the channel 14 spectrum above 2483.5 MHz—all with full protection for Globalstar's satellite operations as well as any ancillary terrestrial operations within Globalstar's licensed spectrum.

¹ See 47 C.F.R. § 15.247 (limiting operation of Part 15 devices in the 2.4 GHz band to the frequencies between 2400 and 2483.5 MHz); 47 C.F.R. § 15.205(a) (restricting emissions above 2483.5 MHz).

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For instance, Part 96 of the Commission's rules establishes guidelines for a sharing regime, managed by Spectrum Access Systems (SASs), that will be applied in the 3.5 GHz band to protect both government users and incumbent fixed-satellite service operations. Globalstar proposes to use the Network Operating System described in its September 10 letter to protect its own satellite communications from harmful TLPS emissions. It may well be possible for the Network Operating System to interoperate with a SAS under a Part 96-like framework and thereby protect Globalstar's licensed services against interference from unaffiliated channel 14 users as well as Globalstar's own terrestrial operations.

Approaches that allow full public use of the entire 2.4 GHz unlicensed band, including newly available interference-avoidance techniques like SAS management, need to be considered before the Commission could conclude that limiting channel 14 exclusively to a comparatively miniscule number of Globalstar users best serves the public interest. Given the extreme congestion of currently available 2.4 GHz spectrum, unlocking Wi-Fi use across the entirety of the band would contribute materially to the national wireless economy and be a major achievement for the Commission.

This notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

Austin C. Schlick

Director, Communications Law

Google Inc.